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THE PERSISTENCE OF COMPETITION.

THE late Walter Bagehot probably knew the "market" better than any other thinker who has grappled with theoretical questions of political economy. This fact lends weight to his views of the present, past, and future of competition, as presented in those luminous essays on *The Postulates of English Political Economy*, written just before his death. John Stuart Mill had said that "only through the principle of competition has political economy any pretension to the character of a science,"¹ — a dictum that compressed into a sentence the economic system of Ricardo, James Mill, Senior, and McCulloch. John Stuart Mill himself distinctly recognized the hypothetical character of this system, and in the chapter on "Competition and Custom" he undertook to show that it was only the wholesale trade and the great articles of commerce that were really under the dominion of competition. At the same time he asserted that the influence of competition was "making itself felt more and more through the principal branches of retail trade in the large towns," and that "the rapidity and cheapness of transport, by making consumers less dependent on the dealers in their immediate neighborhood," were "tending to assimilate more and more the whole country to a large town." Mr. Bagehot, bringing to his investigations a rare mastery of deductive reasoning, a breadth of view gained by many excursions into the domains of history and physical science, and the worldly sagacity of a practical business man of Lombard Street, became convinced that the fundamental postulates of English political economy, besides being only hypothetically true for a great portion of modern European society, were not true at all for uncivilized and semi-civilized societies, nor for European societies in their primitive eras. His demon-

¹ Principles of Political Economy, chapter on Competition and Custom, second paragraph.

stration that in the undeveloped society there is no free transferability of labor was based largely on the researches of such investigators as Sir Henry Sumner Maine; but his demonstration that capital was not so transferable until very recent times, and in modern times is so transferable only in the great commercial nations like England, is peculiarly his own. It consists in showing that the free transferability of capital, and therefore the perfect competitive action of capital, depends on three conditions, namely: the existence of a vast loan fund, the existence of a vast speculative fund, and the free movement of young men into those channels of business that promise the largest profits.¹ Formerly neither of these conditions existed. Until recently they existed only in financial centres like London, but to-day they exist so generally that their influence begins to be universally felt. In this fact Mr. Bagehot discerned the true cause of the rapid extension of competitive economics beyond the limits of wholesale trade. The laws of the "great commerce" were being irresistibly forced upon the minor commerce. Accordingly he concluded: "As 'men of the world' are the same everywhere, so the great commerce is the same everywhere. Local peculiarities and ancient modifying circumstances fall away in both cases; and it is of this one and uniform commerce which grows daily, and which will grow, according to every probability, more and more, that English political economy aspires to be the explanation."² In a word, it was Mr. Bagehot's final conclusion that the mobility of labor and capital is to become practically perfect, and the economic science based on "the principle of competition," though not true at all of the economic world of the past, is to become completely true of the economic world of the future.

Meanwhile Professor J. E. Cairnes, in his attempt to adapt the deductive political economy more perfectly to the present facts of economic society, had discovered limitations of competition not imposed by "local peculiarities or ancient modifying circumstances," but inherent in the nature of men, and there-

¹ *Economic Studies*, edited by R. H. Hutton, pp. 45-47.

² *Economic Studies*, p. 20.

fore permanent. Here, then, in the constitution of the "non-competing groups" was an obstacle to the fulfilment of Mr. Bagehot's predictions that could by no possibility disappear. This limitation was not regarded, however, as of the greatest importance. It would have the effect of creating a sort of stratification of prices, but within each stratum the prices of specific services and things would be determined more and more perfectly by competition. Professor Cairnes himself distinctly admitted the importance of the loan and speculative funds as a competitive force.

It is plain, too [he said], that the capital thus disposable is sufficient for the purpose we have here in view, namely, to render competition effective among the various industries; since we find a portion of it constantly moving abroad for foreign investment — a destination it would scarcely receive while there was a prospect of reaping exceptionally high returns from investment within the country. We have, therefore, in the existence of this fund all that is required for a practically effective competition, so far as *one* instrument of production is concerned, and this without necessitating any serious encroachment on the capital actually engaged in productive operations.¹

Little more than a decade has passed, and we witness a state of things that, to superficial observation at least, seems totally to contradict these final conclusions at which Ricardian political economy had arrived. Just when the disappearance of the last vestiges of a volitional restriction of competition was looked for, and the universal application of the "rule of the market" was confidently expected, we see a wide-spread revival of economic methods and agencies over which *The Wealth of Nations* was read as a funeral service. And most remarkable of all, it is not only labor, to the absolutely free competition of which natural and permanent limitations were admitted, but capital — that very agent which Mr. Bagehot said "runs as surely and instantly where it is most wanted and where there is most to be made of it, as water runs to find its level,"² that seems to have voluntarily massed itself into a solidarity, hedged itself about

¹ *Leading Principles*, Harper's ed., pp. 63, 64.

² *Lombard Street*, p. 13.

with new and most ingenious restrictions, and bound itself by heavy penalties not to run to any new level or deviate from wonted channels. This increasing prominence of pools and combinations has given a new direction to theoretical thought. A majority of the working economists who have kept up with the progress of events no longer look to see the supremacy of an unhindered competition. By not a few of the ablest investigators the gradual suppression of the competition now existing is predicted. Instead of moving toward freer competition, they affirm, we are moving away from it,¹ and reasons are offered to show that in the very nature of business facts no other result is possible. Not only of such vast organizations of capital as the railroad system is this tendency supposed to be true, but of almost all industries having a large permanent investment.² New agencies for adjusting prices it is expected will be necessary. Between a solid body of non-competing employers on one side, and a solid body of non-competing workingmen on the other, will have to stand committees of conciliation and boards of arbitration.³ The standard of the *justum pretium*, the "reasonable price" of the middle ages, will be again set up and enforced by an appeal, through compulsory publicity, to public opinion.⁴

That combinations are to play an increasingly important part in economic affairs, is altogether probable. But that competition is to be to a corresponding extent destroyed, and that arbitration and publicity are to perform any other function than that of equalizing temporary inequalities of competition, as commercial credit equalizes temporary inequalities of economic pressure, or as insurance equalizes temporary inequalities of loss, are conclusions that should not be too hastily accepted. We should be on our guard against two assumptions. We must not assume that because competition is not observable in the form seen on the produce exchange, it is not discoverable in

¹ Arthur T. Hadley, *Railroad Transportation*, p. 65.

² Hadley, *Private Monopolies and Public Rights*, *Quarterly Journal of Economics*, October, 1886.

³ John B. Clark, *The Philosophy of Wealth*, p. 66.

⁴ Report of the Connecticut Bureau of Labor Statistics, 1885, pp. 16, 106.

any form. We must not assume that when market competition is imperfect it may be ignored, as if it were quite non-existent. These assumptions would be as unwarrantable as the assumption of the *a priori* economists has been in regarding the laws of the wholesale market as so nearly true of economic society everywhere and always that conflicting facts might be dismissed as irrelevant. That competition in some form is a permanent economic process, is an implication of the conservation of energy. Given an aggregate of units of unequal energy, their unequal activity is an inevitable consequence. With the complexity of social environment that every quarter of the earth presents, and the limitless variations of heredity, a society composed of individuals of equal energy is an impossibility. Therefore, when market competition seems to have been suppressed, we should inquire what has become of the forces by which it was generated. We should inquire, further, to what degree market competition actually is suppressed or converted into other forms, and within what limits combinations can hold together and act effectively. The combination equilibrium may be, at best, an unstable one. The economic affairs of every member are in a constant ebb and flow. The relative advantages of members as possible competitors cannot remain long unaltered. And however nearly equal they may be at any moment in economic strength, they will be unequal morally. Not every member of a combination goes into it expecting to break the agreement, but hoping that all other members will keep it ;¹ but this is a true description of the conduct of some. Different producers are always unequal in respect of that larger fidelity that imparts a unique value to a commodity through care in selecting the best materials and the most careful and trustworthy workmen. They are unequal also in those faculties by which production is adapted to changing conditions. The discerning and alert secure the advantages that accrue from the first production of superior substitutes for articles in common use, or the first adoption of more economical methods. Disturbances of equilibrium by any of these means may requicken

¹ J. Schoenhof, *The Industrial Situation*, p. 74.

competition within the combination. Competition may be forced upon the combination from without by the accumulation of outside capital seeking employment. The latter is a force that nothing can overcome, though it may be to some extent diverted. It is the organic process of growth, multiplying cells in the vital organism, multiplying individuals in society, multiplying capital in financial centres, — all crowding perpetually upon the existing means of subsistence and profitable occupation, — that insures the permanence of competition throughout the whole range of organic phenomena.

The history of combinations to the present time fully verifies these propositions. Combinations have not prevented the competitive investment of new capital, or sustained prices, or maintained an effective discipline among their own members. The general decline of prices has gone on with little interruption since 1870; that is, during the period within which combinations have had their phenomenal growth. Late calculations¹ give the money cost of the average daily supply of food, dry goods, boots, and fuel, for one adult, as 43.53 cents in 1870, and 30 cents in 1885. The charge for moving a ton of freight per mile over one of the trunk line pool roads is given by the same statistician as 1.853 cents in 1870, and .68 cents in 1885.² The industrial depression of 1883–84, which carried nearly all prices to a much lower level than they had reached in the previous depression of 1878–79, did not spare the goods “controlled” by combinations. As compared with the lowest prices at which they were quoted previous to 1882, cut nails were 12 per cent lower in 1884, and steel rails 39 per cent lower.³ The nail industry affords a good illustration of the inability of combinations to withstand the competitive action of new capital. In 1883 the Western nail association made several attempts to restrict production by suspending work. Notwithstanding this, the number of mills was increased during the year from 68, having an annual capacity of 8,500,000 kegs, to 79, with an

¹ Those of Mr. Edward Atkinson in *Bradstreet's* of December 18, 1886.

² The Relative Strength and Weakness of Nations, *The Century*, January, 1887.

³ *Bradstreet's*, January 10, 1885.

annual capacity of 12,500,000 kegs, and half of the increase was in the western district.¹ In 1884 a new effort was made to restrict competition; but almost before it took shape the manufacture of nails from steel began, and within a year the steel nail mills that sprang up in the Wheeling district, not to mention others, had a capacity of 2,600,000 kegs per annum.² Combinations that might be expected to be strong and efficient, because of their enjoyment of franchises and natural monopolies, are all the while breaking because of internal disagreements. No longer ago than the autumn of 1885 trunk line railroad business was completely disorganized because the roads could not agree on their respective allotments. The anthracite coal combination, formed in 1873, succeeded in controlling the output for three years. Prices were gradually forced to a height that the market would not bear, and stocks accumulated, in spite of the restriction of production, until the combination broke, in August, 1876, and 500,000 tons of coal were sold at auction. Another attempt, made in 1878, was broken by rate-cutting by the Lehigh Valley company and the contention of the Reading company for a larger allotment. A third combination lasted from 1879 to 1884, when its efficiency was destroyed by the commercial depression and the increasing resort to bituminous coal.³ A fourth arrangement, made in 1885, has been imperfectly successful. Of all the industrial combinations that have been described in alarming terms in the popular reviews and anti-monopoly organs, probably not one-tenth have continuously and effectively limited competition. One of the most perfectly organized and most talked about of these has been the wall-paper combination, and its fortunes have been peculiarly instructive. It was formed in 1880, and made a great deal of money. One party was paid \$20,000 a year to cease production. A scale of prices was established, and every member was assigned his proportion of the total production. The penalty for underselling was a forfeit of \$1000, one-half to go to the informer. Monthly meetings were held, at which every manufacturer presented a detailed statement of his sales,

¹ *Bradstreet's*, May 10, 1884.

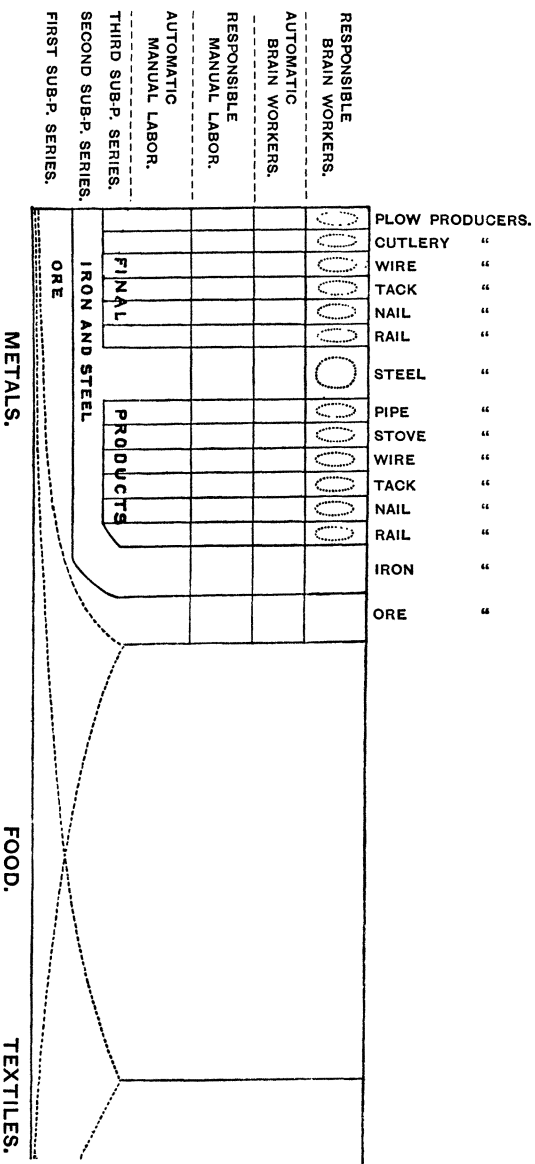
² *Ibid.*, July 18, 1885.

³ *Ibid.*, January 17, 1885.

specifying the quality and price of every roll sold, and naming the purchaser. Then the executive committee equalized the proceeds, taking from those that had oversold, and distributing among those that had not sold up to their quota. Yet, notwithstanding these elaborate precautions, competition was not prevented, either within the combination or from without. One member has chosen to pay \$10,000 a year in forfeits rather than desist from underselling. By paying factories for keeping idle, the combination has tempted so much new capital into the business that it is now impossible to control production or prices.

The conditions determining the area within which combinations can govern market competition, divert it into new channels, and convert it into new forms, are to be found in certain natural demarcations in the industrial structure of society. This structure, resting on the basis of crude materials, which it transforms, adapts, and consumes, is constituted by the segregation of men into functional groups, corresponding to the subdivisions of industrial operations and the broader differences of personal qualification. A rude attempt to indicate this structure is made in the diagram upon the following page. The subdivision of operations corresponds to the evolution of general utilities into utilities that are more and more highly specialized, and to the division and redivision of materials into successive sub-products,¹ or, more strictly, into successive series of sub-products, as the diagram indicates. Professor Clark has shown that the gradation of sub-products marks off the producers into non-competing groups of an entirely different kind from those described by Professor Cairnes, and that the latter, constituted by such differences of personal acquirement as those that separate artisans from unskilled laborers, have been much broken down by industrial progress. Yet there remains a grouping by differences of personal qualification, which Professor Cairnes failed to state in sufficiently general terms. There is one class of workers fit only for automatic manual labor ; namely, common laborers and machine tenders. Above these is a class fit to be

¹ John B. Clark, *The Philosophy of Wealth*, p. 112.



The diagram indicates the division and sub-division of industrial society into groups and sub-groups, by industrial operations and the broader differences of personal qualification. The vertical lines show the division, and, in the group metal producers, the sub-division, into non-competing groups corresponding to industrial operations. The long dotted lines indicate the inter-dependence of the great chief groups, metal, food, and textile producers. The first three horizontal lines, counting from the top, show the division — cutting across the division by industrial operations — into non-competing sub-groups constituted by differences of personal development. The continuation of vertical lines into the lower horizontal lines shows the relation that the producing groups sustain to the gradation of industrial operations into primary, secondary, and tertiary sub-processes. Combinations are represented by the elliptical dotted lines.

intrusted with some responsibility and liberty of self-direction. It is impossible for those in the first class to compete for places with those in the second, though those in the second may become competitors with those in the first in times of industrial depression. A third class is composed of the automatic brain-workers, such as book-keepers ; and a fourth class, of the responsible brain-workers, including the superintendents and directors. The basis of these distinctions, it will be seen, is a much broader one than Professor Cairnes had in mind as the ground of his grouping. It is also broader than the differences of moral quality that the adjective responsible, used for the lack of a more exact word, suggests. It is that broadest psychological gradation, which Mr. Herbert Spencer has described as consisting of differences of mental mass and complexity.¹ These divisions cut transversely across those described by Professor Clark, and constitute sub-groups within his groups. It is, further, within the non-competing groups so constituted that combinations are formed ; and, for reasons fully set forth by Professor Clark, any one combination is usually confined within the limits of a single group. This introduces a new complication, for the combination is a radically distinct aggregate from the non-competing group within which it exists. While the non-competing group consists of those that are supposed not to compete with the members of any other group, but to compete freely with each other, the combination consists of those that are supposed not to compete at all with each other, but to compete freely with those outside of its limits. The employer groups and combinations are further complicated by the centralization there of capital.

It is plain that these demarcations describe groups that are very unlike in composition and very unequal in economic condition. Heterogeneity of composition increases as we go backward in the scale of sub-products toward crude materials, because the dimensions of the group enlarge, both geographically and in respect of numbers. The group producing a final sub-product is necessarily limited in size, not only because it repre-

¹ See the article on The Comparative Psychology of Man, *Mind*, January, 1876.

sents a minute sub-division of a more general product, but because the quantity of a highly specialized product that society can consume is itself limited quite narrowly. The market is easily oversupplied and demands but a relatively small number of producers. It follows that the possibilities of combination are slight in the large and loose groups that produce the primary sub-products, unless their operations are protected by natural, or legal, especially patent-right, monopolies. In the small and compact groups producing final and highly specialized sub-products, the possibilities of effective combination are much greater. Anthracite coal mining is a primary process, but it yields to combination because it is a natural monopoly and easily forms illicit alliances with the railroads. Steel making is a secondary process, amenable to combination because protected by patents; but in iron making, also a secondary process, combination is maintained very imperfectly and with great difficulty. Besides being at this disadvantage in the matter of combination, the primary and secondary sub-product groups are subjected to the further strain that disturbances of the economic equilibrium, anywhere in the industrial structure, distribute themselves backward toward the primary groups. Within each group the distribution is downward, through the sub-groups toward the lowest — the automatic laborers. A strike that stops the production of a sub-product may cause the suspension of operations and the bankruptcy of producers in the sub-product group beyond it, by cutting off supplies; but the liabilities of the advanced group will be due chiefly to the preceding groups, and the bankrupted employers and discharged workmen will force their way downward as competitors for employment; some of the bankrupted employers obtaining places as clerks, and some of the clerks and foremen taking work as machine tenders and laborers. Furthermore, as Professor Clark has shown,¹ the primary and secondary groups dispose of their products to society and receive their recompense only through the tertiary, and are therefore much at the mercy of any conditions that the latter may impose.

¹ *Philosophy of Wealth*, p. 114.

One important conclusion is now in sight. When a product is supplied to society in the full measure of the social needs, the supply of correlative needs being taken into consideration, the further investment of capital and labor in producing that product should cease. That combinations in the final sub-product series may often restrict competition to this extent is evident from the fact that they often attempt to do more. What, then, becomes of the competitive forces—where do accumulating capital and labor find employment? We are confronted here with our primary question, and the answer to it that now appears is one full of meaning for progressive societies. Diversion backward into the primary or secondary sub-product groups would be the natural course for labor and capital to take when barred out from the final groups, but for the facts just noted; *viz.*, that the primary and secondary groups are dependent on the tertiary for their market, and are obliged ultimately to bear a large proportion of the losses of the entire industrial system. In progressive societies, rich in inventive talent, channels of less resistance will be opened by the invention or discovery of new utilities. These may be satisfactions of wants that were never met before, or they may be superior substitutes for the products that the new capital was deterred from producing. The possibilities in the latter direction are shown by the present production from steel of such articles as rails, nails, tacks, and wire, that formerly were made only from iron. The production of Bessemer steel ingots during the first six months of 1885 was 40,000 tons in excess of the production during the second six months of 1884. The production of steel rails was 70,000 tons less. The difference had gone into other manufactures for which puddled iron was formerly used.¹ In societies that have learned to value quality above quantity of possessions, other channels will be found in the almost limitless possibilities of bettering the quality of commodities. New utilities afford opportunities for capital accumulating outside of the combinations; the improvement of quality gives vent to competitive energies within the

¹ *Bradstreet's*, August 1, 1885.

combinations. How this may be, is well illustrated by a certain brass goods combination that has maintained uniform prices but made no attempt to pool production. The result has been precisely that higher form of competition that John Ruskin advocated in *Unto This Last* as the only one that Christian communities should tolerate. The members of the combination have rivalled each other in offering the most perfect goods for the price, and their products have attained a degree of excellence that is unique in American mechanism.

But that competition shall be thus diverted into new and higher forms, it is not necessary that combinations shall keep production below the full supply of the social needs, or maintain prices above the level that yields average returns to the labor and capital employed. Taking one series of years with another, neither of these things can be done. While the area within which combinations are possible is determined by the industrial structure, the degree to which they can control competition within that area is limited by the strength of the competitive forces. These, as we have seen, are two: the pressure of accumulating capital upon the opportunities of employment, and the necessities of the producers already in the field. During an industrial depression the active competition of new capital is at a minimum, but the established producers find increasing difficulty in meeting their liabilities. Self-defence becomes the ruling motive. Conversely, when demand is increasing and prices are rising, the pressure of new capital becomes intense; but, the struggle to meet liabilities having given place to an easy accumulation of gains, the motive for resisting the competition of new capital is weak. Combinations are therefore, in their historic origin and in practical limitations, defensive organizations, for mutual protection against a competition that has become, or that threatens to become, predatory and ruinous. It was during the industrial depression of 1883, when production was far in excess of the demand, that the cut nail combination, already referred to, tried to restore the balance by suspending operations. It was when the prices of their product had declined nearly 13 to 15 per cent within

six months, that the writing paper manufacturers effected a combination that limited production temporarily, but that had the ultimate effect, as one of its members assured the writer, of "building new mills." When the Bessemer steel rail combination made its compact at Long Branch in August, 1885, to limit its output by the demand for consumption, the capacity of the works represented was greatly in excess of the demand, and price-cutting within the combination had been going on for some time. The market improved, and, at the end of a year and a half, the Bulletin of the iron and steel association announced that 1,500,000 gross tons of steel rails were made in 1886, against 950,471 in 1885. And this improvement of the market, enjoyed by other branches of the iron and steel industry also, instead of tempting the combinations to extort the highest possible prices, created a strong feeling on the part of manufacturers that if prices were permitted to go higher, it would so largely increase production as to bring about a reaction.¹ These are but examples at random from many that might be cited. If statistics of the extent and efficiency of combinations could be obtained, the curve undoubtedly would rise and fall with the curve of industrial depressions.

The degree to which combinations can restrict competition is further limited in more specific ways. As defensive organizations they cannot sustain their weakest members indefinitely. All business is in a sense a combination. Commercial credit and personal accommodation enable all parties in the great struggle for existence fairly to try their powers. By such assistance temporary difficulties are overcome. Combinations perform a like service in a negative way by restraining conduct that is mutually injurious. But just as recurring waves of bankruptcy from time to time sweep off the competitors that are essentially weak, notwithstanding the help that they may have alternately received and extended, so an industrial depression of unusual severity or duration forces one or another party to unload his stocks at any prices that he can get, regardless of combination agreements, and consummates the extinction of

¹ *Bradstreet's*, December 25, 1886.

those producers whose disadvantageous situation or antiquated methods make their cost of production relatively high. On the other hand, any attempt of the combination to become an aggressive agency for the positive enrichment of its members is subject to the limitation, that the conditions that might enable a combination to force prices to an unnatural level are the very ones that insure the most disastrous reaction upon such a policy. Other things being equal, new capital will hesitate longest about entering into competition with established producers in those industries in which each producer must have a plant that is costly in proportion to the value of the total product of all producers. But the combination that would reap advantage from this hesitancy must face the fact that it is precisely this expensiveness of plant that entails heavy fixed charges,—which must be met at whatever sacrifice of profits,—and impels competition to a ruinous extreme if more capital is tempted into the business than the normal social need requires. A short-sighted and grasping policy by railroad companies and industrial combinations that might, by a liberal course, have kept entire markets to themselves, has resulted in the building of scores of railroads and hundreds of mills for which no real need existed, and the struggles of these for subsistence has kept rates and prices below the dividend-paying level for years together.

Hence, as combinations learn their unalterable limitations in “the nature of things,” they must adjust prices and production, by a conscious policy, to the normal basis that otherwise will be reached in a more wasteful way. They must permit the full satisfaction of normal demands and allow prices to gravitate to an equality with cost of production. If there is really room for new plant, and new capital seeks investment in new plant, the combination by standing in the way will only encourage investment in excess. If a member of the combination, or a new competitor, is able through the adoption of new machinery or better methods, or by any other advantage that he enjoys, to make his goods at a lower cost than has been possible before, and therefore to put them on the market at a lower price in the

hope of increasing his sales, the combination must let him make the price and leave other members to conform to it by adopting his methods. Failing to do this, it will but intensify the inevitable struggle for survival when it comes. It does not invalidate all this that pools sometimes pay would-be competitors for ceasing production, and that members of combinations can sometimes afford to pay forfeits for price-cutting. These are but means of testing the probable permanence of the existing relations of demand and supply. If the undersupply of the market that tempts new capital is but temporary, the price paid to prevent it from entering the field is the cost of warding off a loss otherwise certain. If the undersupply continues, the attempt to buy off competition will only stimulate it. If forfeits were graduated according to the degree of price-cutting and the volume of sales, and were made recoverable by the party paying them if he demonstrated his ability to maintain his terms permanently, they might afford a nearly perfect test of the price the combination must prepare to accept, and a nearly perfect check against underselling for predatory purposes. Expenditures in these ways, within the limits dictated by prudence and the lessons of experience, are elements in the cost of production under modern conditions as legitimate as insurance premiums, and it is not impossible that combination actuaries will yet reduce the principles governing combination forfeits to something like scientific form.

If our conclusions so far are sound, can the affirmation be maintained that market competition has been really suppressed, or that the essential principles of Ricardian economics have been overthrown? Ricardianism never contemplated competition in the production of additional goods for a market already overstocked, or chronic competition in selling goods below the cost of production. It assumed that when competition had forced the price of any commodity down to the sum that barely recompensed labor and risk, production and underbidding would cease and labor and capital would find other employment. When Ricardo wrote, this assumption was warranted by commercial facts. It is only when production is carried on by processes

involving heavy fixed charges that producers are impelled to continue operations without regard to the state of the market. It is only when large reserves of capital can be drawn on that it is possible to sell below cost, on a great scale, for the sake of winning a strategic advantage. In Ricardo's time these conditions did not exist in any trade or manufacture. If, then, combinations deal effectively only with competition below the solvency line, are not the essential Ricardian principles as true to-day as they ever were, and are not Mr. Bagehot's predictions verified? The competition that wastes resources and ruins competitors is an abnormal process that in a sound industrial system will necessarily create reactions against itself. Such competition will probably encounter an increasingly perfect resistance. The competition that forces production to supply fully the social demand, and forces prices down to an equivalence with the cost of production, is normal. Limitation of the range through which the series of competitive acts may extend but increases the amount of normal competition, since by preventing the wasting of capital it increases one of the chief competitive forces.

FRANKLIN H. GIDDINGS.